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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/567,969

02/10/2006

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EXAMINER

KIM, CHONG R

ART UNIT

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2624

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/567,969	Applicant(s) FOUSSE ET AL.	
	Examiner CHARLES KIM	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/10/2006</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The specification is objected to because it lacks section headings. Correction is required.
See MPEP § 608.01(b).

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 22 and 28 are rejected under 35 U.S.C. 112, first paragraph, as a single means claim. See MPEP 2164.08(a). Claim 22 recites a single means claim that can cover every conceivable means for achieving the stated purpose (implementing the method of claim 15) and is therefore non-enabling for the scope of the claim because the specification discloses at most one those means known to the inventor. A similar rejection also applies to claim 28.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 15, 18, 20, 23, 24, 26, 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 15, the phrase "those of the majority of the generic elements" lacks antecedent basis. A similar rejection applies to claim 23. Appropriate correction is required.

Referring to claim 18, the phrase "wherein the classification and the determination of the generic elements having an impact are performed asynchronously, and in that the computation of the impact is performed synchronously" renders the claim indefinite because it is unclear which steps are being performed asynchronously or synchronously relative to the other steps. For

Art Unit: 2624

example, it is unclear what step the computation of the impact is performed synchronously with.

Appropriate correction is required.

Referring to claim 20, the phrase “wherein it includes” renders the claim indefinite because it is unclear what “it” is referring to. A similar rejection applies to claim 26.

Appropriate correction is required.

Referring to claim 24, the phrase “means of generating generic elements implementing the extraction of the generic elements and the computation of the 2D image of the method of generating overall images including specific elements having characteristics different from those of the majority of the generic elements of the images” renders the claim indefinite because it is unclear what is being claimed. Moreover, the phrase “on a second channel, the method of generating specific elements having characteristics different from those of the majority of the generic elements of an image, performing the generation of these specific elements independently of the generation of the generic elements of the image on a second channel, the device for generating specific elements implementing the method of generating specific elements having characteristics different from those of the majority of the genetic elements of an image, performing the generation of these specific elements independently of the generation of the generic elements of the image, including means of determining the impact of the generic elements on the specific elements” further renders the claim indefinite because the limitations are full of redundancy and ambiguous language.” Appropriate correction is required.

Referring to claim 28, the phrase “overall images” in line 2 lacks antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim(s) 15-21, 23 is/are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Federal Circuit precedent¹ requires that a statutory “process” under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process under 35 U.S.C. 101.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 15-21, 23, 24, 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Rich, U.S. Patent No. 5,488,687 (hereinafter Rich).

Referring to claim 15, Rich discloses a method of generating specific (high resolution) elements having characteristics different from those of the majority of the generic (low

¹ *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

Art Unit: 2624

resolution) elements of an image, comprising the steps of performing the generation of these specific elements independently of the generation of the generic elements of the image [col. 3, l. 56-col. 4, l. 54. Figure 2 illustrates how the generation of the specific elements (e.g., target) is performed independently from the generation of the generic elements (e.g., background).].

Referring to claim 16, Rich further discloses that the performing step includes the determination of the impact of these generic elements on the specific elements [col. 3, ll. 51-55. Note that it is determined whether the background occludes the target.].

Referring to claim 17, Rich further discloses that the determination of the impact on the specific elements includes, for each specific element: the classification of the generic elements as generic elements to be tested if these generic elements are contained by a subdivision of the vision pyramid defined by the observation point including the specific element, the determination of the generic elements having an impact on at least one specific element by scanning through all the generic elements to be tested in order to determine if one of these generic elements is intersected by the straight line passing through the observation point and the specific element, the computation of the impact on the specific element from the generic element determined as having an impact [col. 3, ll. 51-55. Note that it is determined whether the background occludes the target. The Examiner notes that when the background occludes the target, the background intersects a straight line passing through the observation point and the target.].

Art Unit: 2624

Referring to claim 18 as best understood, Rich further discloses that the classification and the determination of the generic elements having an impact are performed asynchronously, and in that the computation of the impact is performed synchronously [col. 3, l. 41-col. 4, l. 54].

Referring to claim 19, Rich further discloses that the impact includes a total or partial masking, or of an atmospheric effect, or of a reflection [col. 3, ll. 51-55].

Referring to claim 20 as best understood, Rich further discloses:

the extraction of the N-dimensional coordinates of the specific elements and of the generic elements, from an observation point provided $Po(t)$ and a visual database [fig. 2],

the determination of the impact from the extracted coordinates [col. 3, ll. 50-55],

the conversion of the coordinates of the specific elements into a predetermined M-dimensional format [col. 2, l. 53-col. 3, l. 25],

the association with these M-dimensional coordinates of the determined impact, providing coordinates and generation characteristics of the specific elements $CF(t)$ [col. 2, l. 53-col. 3, l. 25 and fig. 2].

Referring to claim 21, Rich further discloses that the specific elements correspond to the elements displayed in a calligraphic mode and the generic elements correspond to the elements displayed in a TV mode [col. 1, ll. 45-50].

Referring to claim 23, Rich disclose a method of generating overall images including specific elements having characteristics different from those of the majority of the generic elements of the images, comprising the steps of:

extraction of the N-dimensional coordinates of the generic elements, from the observation point provided $Po(t)$ and a visual database [col. 2, ll. 53-64],

Art Unit: 2624

the computation of the 2D image according to the generic coordinates extracted [col. 2, l. 53-col. 3, l. 36];

on a second channel, the method of generating specific elements having characteristics different from those of the majority of the generic elements of an image, performing the generation of these specific elements independently of the generation of the generic elements of the image [col. 3, l. 56-col. 4, l. 30].

Referring to claim 24 as best understood, Rich discloses a device for generating overall images including:

on a first channel, means of generating generic elements implementing the extraction of the generic elements and the computation of the 2D image of the method of generating overall images including specific elements having characteristics different from those of the majority of the generic elements of the images, including: extraction of the N-dimensional coordinates of the genetic elements, from the observation point provided $Po(t)$ and a visual database, the computation of the 2D image according to the generic coordinates extracted; on a second channel, the method of generating specific elements having characteristics different from those of the majority of the generic elements of an image, performing the generation of these specific elements independently of the generation of the generic elements of the image. on a second channel, the device for generating specific elements implementing the method of generating specific elements having characteristics different from those of the majority of the genetic elements of an image, performing the generation of these specific elements independently of the generation of the generic elements of the image, including means of determining the impact of

Art Unit: 2624

the generic elements on the specific elements [col. 2, l. 53-col. 4, l. 54. Also see rejections above.].

Referring to claim 28, Rich discloses a flight similar for generating the images in claim 22 [col. 1, ll. 31-35].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rich.

Referring to claim 25, Rich further discloses a first (computer graphic) processor for generating the specific elements [col. 1, 8-17], but does not explicitly disclose an electronic card. A computer graphics card appears to be inherent in Rich's system. Nonetheless, Official notice is taken that computer graphics cards were exceedingly well known in the art. Therefore, it would have been obvious to modify Rich to include a computer graphics card, in order to perform the computer graphics processing described above.

Referring to claims 26 and 27, Rich further discloses a second processor including means of generating generic elements and a first processor that also includes the means of generating generic elements [fig. 1].

Art Unit: 2624

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Kim whose telephone number is 571-272-7421. The examiner can normally be reached on Mon thru Thurs 8:30am to 6pm and alternating Fri 9:30am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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